

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA

LARRY HAMILTON,	:	
Plaintiff	:	No. 4:00-CV-00068
	:	(Judge McClure)
v.	:	
	:	
EMERSON ELECTRIC COMPANY,	:	
Defendant	:	

MEMORANDUM

March 8, 2001

BACKGROUND:

On December 22, 1999, plaintiff Larry Hamilton commenced this products liability action with the filing of a complaint in the Court of Common Pleas for Lycoming County. He alleged that he sustained an injury to his left middle finger as a result of a defective miter saw manufactured by defendant Emerson Electric Company (Emerson). The action was removed to this court on January 11, 2000.

Before the court is Emerson's motion for summary judgment. Within the motion is a request that the court exclude Stephen A. Wilcox, Ph.D. from testifying for Hamilton as an expert witness. We will therefore treat Emerson's submission as two separate motions - a motion to exclude the expert witness and a motion for summary judgment. For the reasons stated below, we will grant both motions.

DISCUSSION:

I. SUMMARY JUDGMENT STANDARD

Summary judgment is appropriate if the "pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that *there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law.*" Fed. R. Civ. P. 56(c) (emphasis added).

...[T]he plain language of Rule 56(c) mandates the entry of summary judgment, after adequate time for discovery and upon motion, against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial. In such a situation, there can be 'no genuine issue as to any material fact,' since a complete failure of proof concerning an essential element of the nonmoving party's case necessarily renders all other facts immaterial. The moving party is 'entitled to judgment as a matter of law' because the nonmoving party has failed to make a sufficient showing on an essential element of her case with respect to which she has the burden of proof.

Celotex Corp. v. Catrett, 477 U.S. 317, 323-324 (1986).

The moving party bears the initial responsibility of stating the basis for its motions and identifying those portions of the record which demonstrate the absence of a genuine issue of material fact. Id. at 323. It can discharge that burden by "showing ... that there is an absence of evidence to support the nonmoving party's case." Id. at 325.

Issues of fact are genuine "only if a reasonable jury, considering the evidence presented, could find for the non-moving party." Childers v. Joseph, 842 F.2d 689, 693-94 (3d Cir. 1988)

(citing Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 249 (1986)). Material facts are those which will affect the outcome of the trial under governing law. Anderson, 477 U.S. at 248. The court may not weigh the evidence or make credibility determinations. Boyle v. County of Allegheny, 139 F.3d 386, 393 (3d Cir. 1998). In determining whether an issue of material fact exists, the court must consider all evidence and inferences drawn therefrom in the light most favorable to the non-moving party. Boyle, 139 F.3d at 393; White v. Westinghouse Electric Co., 862 F.2d 56, 59 (3d Cir. 1988).

Once the moving party points to evidence demonstrating that no issue of material fact exists, the non-moving party has the duty to set forth specific facts showing that a genuine issue of material fact exists and that a reasonable factfinder could rule in its favor. Ridgewood Bd. of Educ. v. N.E., 172 F.3d 238, 252 (3d Cir. 1999) (citing Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986); Groman v. Township of Manalapan, 47 F.3d 628, 633 (3d Cir.1995)). "Speculation and conclusory allegations do not satisfy this duty." Ridgewood, 172 F.3d at 252 (citing Groman, 47 F.3d at 637). A party opposing a motion for summary judgment may not merely deny the assertions made by the movant, but must identify specific facts in the record that would contradict the facts identified by the movant. Childers v. Joseph, 842 F.2d 689, 694-95 (3d Cir.1988); First Nat'l Bank of Pa v. Lincoln Nat'l Life Insurance, 824 F.2d 277, 282 (3d Cir. 1987).

II. STATEMENT OF FACTS

On July 10, 1999, Hamilton was at his residence operating a Sears/Craftsman 10" compound miter saw, which is an electric saw with a spinning blade mounted above a work table. Hamilton purchased the saw in 1997. At some point during the operation of the saw, Hamilton's hand came in contact with the saw's blade. As a result, the top of his left middle finger was amputated.

In order to operate the miter saw, the operator must squeeze and hold an on/off trigger switch. To stop the saw, the trigger must be released. The saw contains a braking device designed to stop the rotation of the blade within seconds after the operator releases the trigger. Hamilton contends that the saw was defective in that the brake malfunctioned and did not stop the blade from rotating before his finger made contact with the blade. Although Hamilton is not completely sure how his finger was injured, the miter saw was examined twice after the accident and the blade brake did not function properly.

III. ANALYSIS

Hamilton contends that the saw was defective because the brake did not stop the blade from spinning. He claims that the saw was defective in its manufacturing and/or design, and that Emerson failed to warn users of the possibility that the saw would not immediately stop. Although Hamilton alleges in his complaint that the miter saw contained all three types of

defects, he presents no evidence of either a design defect or a failure-to-warn defect. Our focus will therefore be on Hamilton's burden of proving that the miter saw contained a manufacturing defect.

To prove Emerson's liability, Hamilton relies on the report of an expert, Stephen A. Wilcox, Ph.D. Emerson moves to bar Dr. Wilcox from testifying on the basis of both his qualifications and the content of his report. Emerson then argues that without Dr. Wilcox's testimony, Hamilton has not met his burden on causation, which is an element of a products liability claim. First, we will state the relevant Pennsylvania products liability law. Second, we will determine whether Dr. Wilcox may testify as an expert witness. Third, we will decide whether Hamilton has produced sufficient evidence to reach the jury on his products liability claim.

A. Relevant Products Liability Law

In advancing a theory of strict product liability in Pennsylvania, a plaintiff is required to prove (1) that the product was defective; (2) that the defect existed when it left the hands of the defendant; and (3) that the defect caused the harm. Summers v. Giant Food Stores, Inc., 743 A.2d 498, 508 (Pa. Super. 1999) (citing Riley v. Warren Manufacturing Inc., 688 A.2d 221, 224 (Pa. Super. 1997)). "There are three different types of defective conditions that can give rise to a strict liability claim: design defect, manufacturing defect, and failure-to-warn

defect.” Phillips v. A-Best Products Co., 665 A.2d 1167, 1170 (Pa. 1995).

A product contains a manufacturing defect “when the product departs from its intended design even though all possible care was exercised in the preparation and marketing of the product.” Restatement (Third) of Torts: Prod. Liab. § 2 (1997 Main Vol.).

Hamilton proceeds under the malfunction theory of products liability, which is methodically explained in the Pennsylvania Superior Court case of Dansak v. Cameron Coca-Cola Bottling Co., Inc., 703 A.2d 489 (Pa. Super. 1997):

In certain cases of alleged manufacturing defects. . . the plaintiff need not present direct evidence of the defect. When proceeding on a malfunction theory, a plaintiff may present a case-in-chief evidencing the occurrence of a malfunction and eliminating abnormal use or reasonable, secondary causes for the malfunction. From this circumstantial evidence, a jury may be permitted to infer that the product was defective at the time of sale.

Id. at 495 (citing O’Neill v. Checker Motors Corp., 389 567 A.2d 680, 682 (Pa. Super. 1989)). “The malfunction theory. . . does not relieve the burden of establishing a defect. However, the malfunction itself is circumstantial evidence of a defective condition.” Id. at 496 (citing D’Antona v. Hampton Grinding Wheel Co., Inc., 310 A.2d 307, 309 (Pa. Super. 1973)).

The Third Circuit has articulated that in order for plaintiff to meet its burden under the malfunction theory, he must present sufficient evidence: (1) that the product malfunctioned; (2) that plaintiffs used the product as intended or reasonably expected by the manufacturer; and (3) the absence

of other reasonable secondary causes. Altronics of Bethlehem, Inc. v. Repco, Inc. 957 F.2d 1102, 1105 (3d Cir. 1992).

A prima facie case under the malfunction theory does not require expert testimony explaining how the product was defective or how the defect arose from the manufacturer or seller. Dansak, 703 A.2d at 496. Even without articulating a specific defect, a plaintiff may sustain his burden by producing circumstantial evidence of the defect. Such circumstantial evidence may include:

- (1) The malfunction of the product
- (2) Expert testimony as to a variety of possible causes
- (3) The timing of the malfunction in relation to when the plaintiff first obtained the product
- (4) Similar accidents involving the same product
- (5) Elimination of other possible causes of the accident
- (6) Proof tending to establish that the accident does not occur absent a manufacturing defect

Id. (citing Litvin and McHugh, Pennsylvania Torts: Law and Advocacy (1996) § 9.33).

As noted above, a plaintiff suing under the malfunction theory must negate evidence of reasonable secondary causes of the malfunction. The Supreme Court of Pennsylvania has interpreted this concept liberally, allowing a plaintiff to reach the jury if he presents "a case-in-chief free of secondary causes." Rogers v. Johnson & Johnson Products, Inc., 565 A.2d 751, 755 (Pa. 1989).

This principle was summarized in Dansak:

[I]n plaintiff's case-in-chief, plaintiff [need not] negate every theoretically conceivable secondary cause for the malfunction. Rather. . . the plaintiff fails to establish a prima facie case only if the plaintiff does not negate evidence of other reasonable, secondary causes or abnormal use **that is actually introduced during the plaintiff's case-**

in-chief. In other words, the plaintiff fails to establish a prima facie case if, ***based upon his own proof,*** more than one cause could account for the accident.

Dansak, 703 A.2d at 497 (quoting Schlier v. Milwaukee Electrical Tool Corp., 835 F.Supp. 839, 841 (E.D. Pa. 1993)) (emphasis added). As such, "[s]ummary judgment is not warranted simply because the defendant hypothesizes (or even presents evidence of) reasonable secondary causes." Id. Thus, a plaintiff need not look to actively "eliminate" the possibility of reasonable secondary causes. He is merely required to present a case-in-chief that either contains no evidence of reasonable secondary causes or negates any such evidence that was initially present.

B. Dr. Wilcox's Expert Testimony

1. General Law of Expert Testimony

In attempting to exclude Dr. Wilcox as an expert witness, Hamilton challenges both his qualifications and the reliability of his testimony. Federal Rule of Evidence 702 provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.

Pursuant to Rule 702, the trial judge should act as a gatekeeper to make sure that all expert testimony or evidence is both relevant and reliable. See Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 589 (1993); Kannankeril v. Terminix Int'l, Inc., 128 F.3d 802, 806 (3d Cir. 1997). The Daubert gatekeeping function applies not only to scientific

testimony, but to all expert testimony. Kuhmo Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 147 (1999). "[Rule 702] makes no relevant distinction between 'scientific' knowledge and 'technical' or 'other specialized' knowledge. It makes clear that any such knowledge may become the subject of expert testimony." Id.

Rule 702 has three major requirements: (1) the proffered witness must be an expert; (2) the expert must testify about matters requiring scientific, technical, or specialized knowledge; and (3) the expert's testimony must assist the trier of fact. Kannankeril v. Terminix Int'l, Inc., 128 F.3d 802, 806 (3d Cir. 1997 (citing In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 741-42 (3d Cir. 1994))).

2. Summary of the Testimony

Dr. Wilcox's testimony is encompassed in a report to Hamilton's attorney. Dr. Wilcox states that, in preparing the report, he reviewed the depositions of Hamilton and defense witness Michael Gililland, and the operator's manual for the miter saw.

First, Dr. Wilcox describes the type of cut that Hamilton was making. He then states that "Although [Mr. Hamilton] has no recollection of the accident, it appears that upon release of the trigger, the blade brake did not engage as it should have in order to stop the rotation of the blade. Therefore, as the blade was coming up, it continued spinning for several seconds, at which time Mr. Hamilton's left hand was apparently caught by the

moving blade." (Wilcox report at 1-2, Emerson's Exhibit G.) He opines that the failure of the brake made the saw "defective". Id. at 3.

Dr. Wilcox then remarks on the cause of the accident. He lists six reasons why, in his opinion, the defective saw caused Hamilton's injuries. He frames the causation testimony in terms of the "foreseeability" of Hamilton's injuries as a result of the defective saw. The reasons are as follows:

(1) Hamilton expected the blade to be stopped. Dr. Wilcox explains that "[i]f people expect something to be a certain way, they are at risk of misperceiving it in line with their expectations."

(2) The guard was not completely transparent, and thus Hamilton could not fully see the blade as it was spinning.

(3) The spinning blade provides subtle visual cues; when the saw blade is spinning, a saw operator cannot see the blade's teeth because they virtually disappear at the high speed.

(4) The auditory cues were subtle; since the power was off after Hamilton released the trigger, the saw made little sound, and Hamilton did not notice that the blade was still spinning.

(5) "Hamilton's actions would have been largely unconscious." In explaining this statement, he declares that "a manual task such as the one in question is not typically done 'intellectually,'" meaning that "people naturally distribute their attention on what they are doing and do not tend to focus on what they already know (or think they know)," and thus

Hamilton, because he was concentrating on cutting the wood, probably did not examine the blade afterwards to see if it was still spinning.

(6) Because people naturally focus their attention on what they are doing at the time and not on what they think they already know, it would not have been typical for Hamilton to examine the blade to see if it was still spinning, as Hamilton assumed that the blade had stopped.

In a supplement to his report, Dr. Wilcox states that since preparing the report, he has reviewed the videotape of Hamilton describing the accident, videotapes by Emerson showing the miter saw in question, and an expert report written by Gililland. While he notes that his opinion that the brake failed is unchanged, he states that the brake should have "failed safe" by either (1) stopping the saw from working; or (2) providing a clear and unambiguous indication that the brake had failed. (Letter from Dr. Steven B. Wilcox to Attorney Joseph F. Orso III, Emerson's Exhibit H.)

We note that before rendering his opinion, Dr. Wilcox did not personally examine or do any analysis on the miter saw in question or, for that matter, any miter saw at all. (See Wilcox Dep. at 97-98.)

3. Dr. Wilcox's Qualifications

Emerson contends that Dr. Wilcox is not qualified to be an expert on miter saw accidents. In Elcock v. Kmart Corp., 233

F.3d 734, 741 (3d Cir. 2000), the Third Circuit articulated the requirements a witness must meet to be deemed an expert:

Rule 702 requires the witness to have specialized knowledge regarding the area of testimony. The basis of this specialized knowledge can be practical experience as well as academic training and credentials. We have interpreted the specialized knowledge requirement liberally, and have stated that this policy of liberal admissibility of expert testimony extends to the substantive as well as the formal qualification of experts. However, at a minimum, a proffered expert witness... must possess skill or knowledge greater than the average layman...

Id. (citing Waldorf v. Shuta, 142 F.3d 601, 625 (3d Cir. 1998)) (citations and internal quotation marks admitted). To be sure, witnesses can qualify as experts under Rule 702 on the basis of practical experience alone, and a formal degree, title, or educational speciality is not required. See Lauria v. Nat'l RR Passenger Corp, 145 F.3d 593, 599 (3d Cir 1998) (citing American Tech. Resources v. United States, 893 F.2d 651, 656 (3d Cir. 1990)).

Dr. Wilcox is a psychologist with special training in the area of "human factors." He defines human factors as "the application of knowledge about human beings to design." (Wilcox Dep. at 29.) In the late 1980s, he participated in the design of various power woodworking equipment, such as a hand-held worm drive saw and various orbital sanders. The record does not clearly show the level of involvement Dr. Wilcox had in the design of these tools other than that he made recommendations about the shape of the drive saw's safety guard as it relates to the anatomy of a human user. (Wilcox Dep. at 38.) It seems that

he also had a role in writing warnings and instructions. (Id. at 35.) From 1966 to 1973, Dr. Wilcox worked as a carpenter. (Id. at 43-44.) He is unsure if he has ever used a miter saw, but is certain that if he has used one, it has not been after 1973. (Id. at 50.)

Emerson argues that Dr. Wilcox is not qualified to give an opinion about a defective miter saw because he does not possess a degree in engineering, he has never designed a product by himself nor led a design team, and he admittedly is unsure if he has ever used a miter saw.

The fact that Dr. Wilcox does not have an engineering degree does not automatically disqualify him from testifying as an expert in this case. The controlling authority makes it clear that a formal degree is not required. Additionally, even though Dr. Wilcox may have never led a design team, he may still have been exposed to design procedures.

The fact that Dr. Wilcox may have never used a miter saw is a stronger argument in favor of his disqualification, but his lack of firsthand experience is not fatal to his qualifications. See Daubert, 509 U.S. at 592 (“[A]n expert is permitted wide latitude to offer opinions, including those that are not based on firsthand knowledge or observation.”). See also Smith v. Ingersoll-Rand Co., 214 F.3d 1235, 1244 (10th Cir. 2000) (finding a safety consultant and a human factors expert qualified to testify about design of a milling machine even though neither witness had firsthand experience with milling machines).

Though Dr. Wilcox's qualifications are marginal at best, we find him to be qualified under the Third Circuit's liberal standard for qualifying experts. Judging by his curriculum vitae, Dr. Wilcox has extensive experience and acclaim in the area of human factors, and any testimony he might give about the tendencies of human machine operators is clearly within his expertise. Dr. Wilcox is certainly less qualified to make a declaration that the miter saw was defective, as he is not familiar with the design of a miter saw. He does, however, have some experience in designing safety components of power woodworking tools, and he was a carpenter for eight years. At a minimum, he possesses knowledge greater than the average layman. See In re Unisys Savings Plan Litigation, 173 F.3d 145, 170 (3d Cir. 1999) (quoting Holbrook v. Lykes Bros. Steamship Co., Inc., 80 F.3d 777, 782 (3d Cir. 1996) ("[I]t is an abuse of discretion to exclude testimony simply because the trial court does not deem the proposed expert to be the best qualified or because the proposed expert does not have the specialization that the court considers most appropriate.")).

4. Scientific, Technical or Other Specialized Knowledge

Emerson asserts that Dr. Wilcox's testimony is unreliable and therefore inadmissible. "In interpreting [the requirement that an expert testify about matters requiring scientific, technical, or other specialized knowledge], we have concluded that an expert's testimony is admissible so long as the process or technique the expert used in formulating the opinion is

reliable." Kannankeril, 128 F.3d at 806 (citing Paoli, 35 F.3d at 742) (internal quotation marks omitted).

"Daubert explains that the language of Rule 702 requiring the expert to testify to scientific knowledge means that the expert's opinion must be based on the 'methods and procedures of science' rather than on 'subjective belief or unsupported speculation;' the expert must have 'good grounds' for his or her belief." Paoli, 35 F.3d at 742 (citation omitted).

The trial judge must determine whether the testimony has "a reliable basis in the knowledge and experience of [the relevant] discipline." Daubert, 509 U.S. at 590. "[The gatekeeping requirement] is to make certain that an expert, whether basing testimony on professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." Kuhmo Tire Co., 526 U.S. at 152.

In Paoli, the Third Circuit suggested a list of factors that the trial judge may consider in determining reliability. These factors include:

- (1) whether a method consists of a testable hypothesis;
- (2) whether the method has been subject to peer review;
- (3) the known or potential rate of error;
- (4) the existence and maintenance of standards controlling the technique's operation;
- (5) whether the method is generally accepted;
- (6) the relationship of the technique to methods which have been established to be reliable;
- (7) the qualifications of the expert witness testifying based on the methodology; and
- (8) the non-judicial uses to which the method has been put.

Paoli, 35 F.3d at 742 n. 8 (citing Daubert, 509 U.S. at 593-94; U.S. v. Downing, 753 F.2d 1224, 1238-41 (3d Cir. 1985)). Factors One, Two, Three, and Five were articulated in Daubert, and Factors Four, Six, Seven, and Eight were introduced by the Third Circuit in Paoli.

"The Daubert factors do not constitute a definitive checklist or test, and the gatekeeping inquiry must be tied to the particular facts." Kuhmo Tire Co., 526 U.S. at 138 (citations omitted). The Supreme Court has recognized that in certain cases, reliability concerns may focus more upon the expert's personal knowledge or personal experience than on the Daubert factors. Id. at 150. But even in these types of cases, "some of Daubert's questions can help to evaluate the reliability even of experience-based testimony." Id. at 151. "[The Daubert factors] may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert's particular expertise, and the subject of his testimony. Id. at 150. "Thus, whether Daubert's specific factors are, or are not, reasonable measures of reliability in a particular case is a matter that the law grants the trial judge broad latitude to determine." Id. at 152.¹

¹ The Third Circuit has stated that the flexible application of the gatekeeping requirement applies not only to the Daubert factors but also to the additional factors listed in Paoli. See Heller v. Shaw Industries, Inc., 167 F.3d 146, 152 (3d Cir. 1999).

Although Daubert stated that the focus of the admissibility inquiry must be solely on principles and methodology and not on conclusions, the Supreme Court subsequently modified that rule in General Electric Co. v. Joiner, 522 U.S. 136 (1997). The Court wrote:

But conclusions and methodology are not entirely distinct from one another. Trained experts commonly extrapolate from existing data. But nothing in either Daubert or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the ipse dixit² of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.

Id. at 146. "Consequently, although principles and methodology remain the focus of a Daubert inquiry, this focus need not completely pretermitt judicial consideration of an expert's conclusions." In re TMI Litigation, 193 F.3d 613, 682 (3d Cir. 1999) (quoting Ruiz-Troche v. Pepsi Cola of Puerto Rico Bottling Co., 161 F.3d 77, 81 (1st Cir. 1998)) (internal quotation marks omitted).

Generally, the reliability threshold is a low one. "[A]n expert opinion must be based on reliable methodology and must reliably flow from that methodology and the facts at issue - but it need not be so persuasive as to meet a party's burden of proof or even necessarily its burden of production." Heller, 167 F.3d at 152 (3d Cir. 1999).

² *Ipse dixit* is defined in Black's Law Dictionary as "a bare assertion resting on the authority of an individual." Black's Law Dictionary 828 (6th ed. 1990).

Dr. Wilcox's testimony can be divided into two relevant sections. First, he testifies that the saw's brake contained a defect. Second, he testifies that the defective brake caused Hamilton's injuries. Emerson's objections to the testimony focus primarily on the first portion. We will address these arguments and then determine the admissibility of the subsequent "causation" testimony.

Emerson argues that Dr. Wilcox's "defect" testimony is not reliable for four reasons:

(1) Dr. Wilcox did not examine the miter saw prior to making his report; he only reviewed Hamilton's and Gililland's depositions and read the saw's owner's manual.

(2) Dr. Wilcox performed no testing or evaluation and made no measurements in furtherance of his analysis.

(3) Dr. Wilcox's opinion that the brake failed was pure speculation based on Gililland's testimony that the brake did not work when he operated the saw one year after the incident, and his "general impression" that Hamilton had testified that the brake did not work. (Wilcox Dep. at 68.)

(4) Dr. Wilcox did not rule out any secondary causes of the saw's failure, making his testimony inherently unreliable.

To begin, we examine Emerson's first and second arguments. Dr. Wilcox's lack of firsthand knowledge of miter saws does not make his testimony per se unreliable. We are guided by the Tenth Circuit in the above-mentioned Smith, which held not only that the safety consultant and the human factors expert were each

qualified to give an opinion, but also that their opinions were admissible notwithstanding their lack of firsthand experience with milling machines. See Smith, 214 F.3d at 1244. The fact that Dr. Wilcox did not do any independent examination or evaluation of this particular miter saw does not automatically exclude his testimony. The Third Circuit has recognized testimony by experts who did not perform any independent analysis. See Kannankeril, 128 F.3d at 807 (stating that in the context of medical testimony, "it is perfectly acceptable, in arriving at a diagnosis, for a physician to rely on examinations and tests performed by other medical practitioners."). See also Voilas v. General Motors Corp., 73 F.Supp.2d 452, 461 (D.N.J. 1999) (permitting an expert economist to summarize a corporation's business plans for the jury). As long as the expert's methodology is sound, he need not necessarily do any of his own analysis.

As for Emerson's third argument, we agree that Dr. Wilcox's declaration that the saw was defective does not withstand any kind of Daubert scrutiny. Recently, the Third Circuit twice found expert testimony to be unreliable under Daubert. In Elcock v. Kmart Corp., 233 F.3d 734 (3d Cir. 2000), the court vacated the district court's decision to admit the testimony of Dr. Chester Copemann, a vocational rehabilitation expert who testified that plaintiff Elcock was 50% to 60% vocationally disabled. Based on the trial record, the court was unclear as to Dr. Copemann's methodology. Among the reasons for the court's

decision was that "because Copemann never explained his method in rigorous detail. . . it would have been nearly impossible. . . to find that his method consisted of a testable hypothesis for which there are standards controlling the technique's operation." Id. at 747 (citing Paoli, 35 F.3d at 742 n. 8) (internal quotation marks omitted). Furthermore, the court found that exclusion was warranted because Dr. Copemann did not produce evidence that his method was generally accepted or that it related to methods that had been established to be reliable. Id. at 748-49.³

In Oddi v. Ford Motor Co., 234 F.3d 136 (3d Cir. 2000), the Third Circuit upheld the district court's decision to exclude the expert testimony of engineer John Noettl, who testified that plaintiff Oddi had sustained injuries because the bumper of his Ford truck was defectively designed. The Court of Appeals agreed with the district court that because Noettl failed to test his hypothesis regarding the design of the bumper or submit any literature upon which he relied, he

used little, if any methodology beyond his own intuition. There is nothing here to submit to peer review, and it is impossible to ascertain any rate of error for Noettl's assumptions about the forces that caused Oddi's horrific injuries. Similarly, no standards control his analysis, and no "gatekeeper" can assess the relationship of Noettl's method to other methods known to be reliable and the non-judicial uses to which it has been put.

Id. at 158. The court ultimately found that "Noettl's ipse dixit does not withstand Daubert's scrutiny." Id.

³ Rather than solely reversing the district court's decision, the Third Circuit remanded and ordered the district court to hold a Daubert hearing to assess the testimony's reliability.

As with the experts in Elcock and Oddi, Dr. Wilcox does not use any discernible methodology to determine that the miter saw contained a defect. This is demonstrated by an exchange at Dr. Wilcox's deposition between Dr. Wilcox and Emerson's attorney, Warren Voter:

DR. WILCOX: Given basic human capabilities and limitations, the likelihood of an accident was high in my opinion given that the brake failed.

ATTORNEY VOTER: How does the fact that the brake did not work related [sic] to a conclusion that the saw was defective?

DR. WILCOX: The way I would define defectiveness as being not containing what's necessary for the saw to be safe.

ATTORNEY VOTER: Okay. And what did the saw not contain to make it safe?

DR. WILCOX: It didn't contain an adequate brake, an adequately operating brake.

ATTORNEY VOTER: And what was inadequate about the brake?

DR. WILCOX: That it didn't work [subsequent to the accident].

ATTORNEY VOTER: That's it? That's the sole support for your claim, that it was inadequate, the fact that at some point in time it did not operate?

DR. WILCOX: Yes.

This conversation reveals that Dr. Wilcox makes two assumptions. First, he assumes that because the brake did not work at certain times after the accident, it did not work at the time of the accident. Second, he assumes that because the brake did not work at the time of the accident, it was defective. Dr. Wilcox does not offer any discernible methodology that might have led to his conclusion that the brake did not work at the time of

the accident. His "method" consists only of the assumption that because the brake failed subsequent to the accident, it must have failed at the time of the accident. Therefore, he has not shown that his hypothesis concerning the brake's malfunction could be tested. He has completely disregarded any margin for error in that he does not recognize the possibility that his assumption is incorrect or imprecise. He offers no evidence that his process is generally accepted or that it features any standards that control its operation. In fact, he does not even explain his methodology in sufficient detail such that we can competently apply any of the Daubert factors to his analysis. His conclusion that the saw was defective is based only on his own authority, which is a violation of Rule 703. See Oddi, 234 F.3d at 158 (quoting Paoli, 35 F.3d at 742) (internal quotation marks omitted) ("An expert's opinion must be based on the methods and procedures of science rather than on subjective belief or unsupported speculation."). Therefore, we will not allow Dr. Wilcox to testify as an expert that the saw was defective.⁴

In its brief, Emerson fails to comment on the remainder of Dr. Wilcox's testimony, which apparently goes towards the issue of causation. Dr. Wilcox explains that for a variety of reasons, it was foreseeable that the malfunctioning brake would cause an injury to Hamilton's hand.

⁴ Our decision to exclude this testimony as unreliable is based also on Dr. Wilcox's great lack of experience with power woodworking tools and miter saws specifically.

Dr. Wilcox provides no assurance that his methodology here is reliable either. Certainly, the Daubert factors are not as pertinent in this context since his testimony is in the realm of human tendencies rather than scientifically provable outcomes and concrete scientific methods. Still, Dr. Wilcox's testimony fails under even the most limited Daubert analysis.

As with the experts in Elcock and Oddi, Dr. Wilcox has failed to explain sufficiently his methodology to survive a Daubert inquiry. Dr. Wilcox proffers six reasons why the defective miter saw caused Hamilton's injury. Three are psychological principles, and three are observations about the miter saw in question.

i. Psychological Principles

Dr. Wilcox states that Hamilton expected the blade to be stopped because "expectations have a powerful effect upon perception. If people expect something to be a certain way, they are at risk of misperceiving it in line with their expectations." (Wilcox Report at 2.) Dr. Wilcox offers this assertion without giving it any psychological background. He has not outlined the method that experts in his field use to evaluate people's expectations based on perception. Dr. Wilcox has not shown that he or anyone else has tested this assertion in other studies of human perception. There is no evidence that the "method" he uses to make this claim is generally accepted by psychologists or human factors authorities, or that it has been evaluated by Dr. Wilcox's peers. Dr. Wilcox makes the blanket assertion that this

danger of misperception applies to "people." He does not explain the types of the people or what percentage of the general population are at risk of this type of misperception, and thus ignores any possible margin for error. Dr. Wilcox fails to offer any psychological standards that may guide this assertion, and he does not demonstrate that his type of analysis is used outside the context of the judicial system. Too little is known about his "methodology" to allow him to include it in his expert testimony.

Similar problems abound in Dr. Wilcox's other two explanations of psychological principles. He asserts that (1) "Mr. Hamilton's actions would have been largely unconscious" because "[a] manual task such as the one in question is not typically done 'intellectually;'" and (2) "Mr. Hamilton's attention would have been on the task at hand" because "[p]eople naturally distribute their attention toward what they are doing and do not tend to focus on what they already know (or think they know)." Dr. Wilcox again fails to give a background of the methods he uses to come up with these statements. There is no evidence that any of his methodology has attained general acceptance or has been subject to peer review. By making these two general proclamations, he ignores any potential rate of error. He does not incorporate any standards that may govern either principle's existence, and there is no evidence of the utility of his type of analysis outside of the courtroom. These

two statements are similarly unreliable under the Daubert line of cases.

ii. Statements Regarding the Miter Saw

The three remaining reasons for Dr. Wilcox's opinion concern the miter saw itself. They are that (1) since the guard was not completely transparent, Hamilton did not see the spinning blade; (2) because the blade was spinning too quickly, Hamilton did not see the blade's teeth and did not realize that the blade was moving; and (3) because the power was off when Hamilton released the trigger, the saw made little sound.

These statements are not reliable because Dr. Wilcox has done nothing to explain or validate his methodology. All of these declarations concern the operation of the miter saw, but Dr. Wilcox admittedly did not inspect the miter saw prior to writing his report, and he in no way shows that his methodology is reliable. While we noted above that a lack of firsthand experience with a miter saw does not necessarily mean that Dr. Wilcox is not qualified to offer an opinion on miter saws, we find that it adds to the unreliability of his testimony when he does not offer any independent validation of his methodology.

Accordingly, even if we were to overlook Dr. Wilcox's lack of experience with any miter saw, we would still find his testimony unreliable because he has not demonstrated that his methodology passes any of the Daubert tests. He provides no evidence that he tested his hypotheses regarding the saw's inadequate visual and auditory cues or the "transparency" of the

guard, and he does not show that these hypotheses were even testable. Furthermore, he offers no other reports on miter saws that demonstrate that his studies of the spinning blade or the machine's sound are generally accepted or have been subject to peer review. He fails to offer evidence that his methodology concerning miter saws carries even an indicia of reliability; thus the testimony outlining his final three reasons for the accident must be excluded.

Dr. Wilcox's supplemental report must also be excluded. Dr. Wilcox's proclamation that the saw should have "failed safe" by either stopping the blade or alerting Hamilton that the blade was still spinning is another statement based on pure speculation. As with his bald assertion that the saw was defective, he has not demonstrated that this conclusion was supported by any discernible methodology, a fact adverse to its reliability under Daubert. In addition, Dr. Wilcox's lack of experience with and knowledge of miter saws persuade us to conclude that this piece of testimony is unreliable.⁵⁶ We therefore hold that Dr. Wilcox may not testify as an expert in this action.

5 Dr. Wilcox's inadmissible declaration that the miter saw should have "failed safe" is Hamilton's only evidence of a possible design defect in the saw.

6 We need not consider Emerson's argument that Dr. Wilcox's testimony must be excluded because he does not exclude any alternative causes of Hamilton's injury. A thorough discussion of alternative causes is present in the analysis of Hamilton's prima facie case, discussed below.

5. *In Limine* Hearing

In making our admissibility determination, we are cognizant of the Third Circuit case of Padillas v. Stork-Gamco. Inc., 186 F.3d 412 (3d Cir. 1999), which emphasized "the importance of in limine hearings. . . in making the reliability determination required under Rule 702 and Daubert." Id. at 417. In Padillas, plaintiff Padillas's expert submitted a conclusory report stating that Padillas was injured by the defendant's Drum and Thigh Cutter. With language comparable to that in the instant case, the district court excluded the report because "[the expert] provides no basis for the conclusions and observations that he makes, [and]. . . [h]e does not set forth in the report the methodology by which he made his determinations in this case." Id. at 416, 417 (citing the opinion of the trial court). The Third Circuit reversed and remanded, finding that the district court abused its discretion for not holding an in limine hearing to determine the expert's methodology. The court found that

[t]he district court's analysis of the [expert report] does not establish that [the expert] may not have 'good grounds' for his opinions, but rather, that they are insufficiently explained and the reasons and foundations for them inadequately and perhaps confusingly explicated. But if the court was concerned with the factual dimensions of the expert evidence. . . it should have held an *in limine* hearing to assess the admissibility of the [report], giving plaintiff an opportunity to respond to the court's concerns.

Id. at 418. We will not hold an *in limine* hearing for two reasons. First, our case is distinguishable from Padillas in that we have before us enough evidence to determine the reliability of Dr. Wilcox's testimony under Daubert. In addition

to Dr. Wilcox's report and its supplement, we examined his deposition, at which he admitted that he has very possibly never used a miter saw and certainly did not examine Hamilton's saw in making his report. These deficiencies are primary justifications for our determination that his testimony is unreliable under Daubert. Our second reason for not holding an *in limine* hearing is that we have cited independent, non-Daubert reasons to both exclude Dr. Wilcox's testimony and grant summary judgment to Emerson. These reasons are discussed below.

6. Common Understanding

Although Emerson successfully argues that Dr. Wilcox's testimony is unreliable under Daubert, it fails to raise the most compelling argument against its admission. Dr. Wilcox's testimony should be excluded because it would not assist the jurors in determining anything that they could not determine themselves. "As a general principle, expert evidence is not necessary if all the primary facts can be accurately and intelligibly described to the jury, and if they, as persons of common understanding, are as capable of comprehending the primary facts and of drawing correct conclusions from them as are witnesses possessed of special or peculiar training of the subject under investigation." Oddi, 234 F.3d at 159 (citations and internal quotation marks omitted). Expert testimony is more likely to be inadmissible if the inferences drawn by the expert are ones that can be, and typically are, made from common observation. 31A Am.Jur.2d Expert and Opinion Evidence § 43.

Courts have been prone to exclude the testimony of "human factors" experts when the facts and inferences to which they testified were within the common knowledge of jurors. In Scott v. Sears Roebuck & Co., 789 F.2d 1052, 1054 (4th Cir. 1986), the Fourth Circuit, in reviewing a motion for a new trial on a personal injury action involving a defective curb, found that the district court improperly admitted statistical evidence that persons wearing high heels tend to avoid walking on grates. The court explained that the evidence was excluded because "the witness was simply repeating what is common knowledge and common sense." Id. Other courts have reached similar results. See Persinger v. Norfolk & W. Ry. Co., 920 F.2d 1185, 1186, 1188 (4th Cir. 1990) (finding that human factors expert "did no more than state the obvious" where his testimony, "[w]hen stripped of its technical gloss," was that it was more difficult to lift an object from a seated position); Christopher v. Madison Hotel Corp., 875 F.2d 314 (4th Cir. 1989) (upholding the district court's exclusion of plaintiff's expert testimony explaining friction tests on a bathroom floor because "[i]t is common knowledge that shiny bathroom floors are slippery"); United States v. Affleck, 776 F.2d 1451, 1458 (10th Cir. 1985) (affirming the district court's exclusion of the testimony of a "memory expert" because "the average person is able to understand that people forget.").

Dr. Wilcox's psychological testimony purportedly would help a jury to understand Hamilton's thought processes while operating the miter saw. This testimony is not necessary to assist an

ordinary jury. Hamilton could describe (and has described in his deposition) the scene of the accident such that a jury could understand the requisite facts. A jury needs to understand how a woodworker uses a miter saw, the process that Hamilton utilized when cutting the wood, the occurrence of the accident itself, Hamilton's state of mind, and any environmental conditions that were present on the day in question. Hamilton's lay testimony alone could be sufficient for the jury to understand the necessary facts of the case.

Moreover, an ordinary jury could draw reasonable conclusions from these facts. Based on Hamilton's testimony, Dr. Wilcox theorizes that the accident occurred for these reasons:

(1) Hamilton expected the brake to work properly; (2) he did not see the spinning blade through the guard; (3) the blade was spinning too quickly to see the teeth; (4) the saw was not loud enough to signal danger; (5) he was using the saw with little conscious awareness of anything that was going on around him; and (6) he did not take into account that something might go wrong with the saw. In his supplemental report, Dr. Wilcox states only that if the brake failed, it should have "failed safe" by either stopping the saw from working or alerting Hamilton that the blade was still spinning. These inferences can be and typically are made from common observation; a jury exercising ordinary common sense could correctly make any of these inferences without Dr. Wilcox's opinion. Accordingly, we will not allow this portion of Dr. Wilcox's testimony at trial.

C. Products Liability Application

After applying the relevant products liability law to Hamilton's evidence, we find that summary judgment should be granted in favor of Emerson. Without Dr. Wilcox's testimony, Hamilton must rely on his own testimony to meet his burden. As stated, Hamilton is proceeding under the malfunction theory, under which a plaintiff may get to the jury by providing sufficient evidence that the product malfunctioned and raising an inference of a defect from that malfunction.

Emerson vigorously argues that because Hamilton is not sure that the brake malfunctioned on the day he was injured, he cannot establish that there was a defect. In Agostino v. Rockwell Manufacturing Co., 345 A.2d 735 (Pa. Super. 1974), plaintiff Agostino cut his leg while using a power saw. The saw contained a guard that was to cover the blade when the cut was complete. Agostino admitted that he did not know where the guard was when his leg was cut, but he claimed that the guard was "jammed" after he was injured. The court found that, based on evidence of his injury and the jammed guard, a jury could have properly inferred that the guard malfunctioned. The court went on to state that "it would be most unreasonable to bar recovery because appellant did not observe the location of the guard the moment his leg was being lacerated." Id. at 740.

The instant facts bear a resemblance to the facts of Agostino in that both saws malfunctioned after their respective

accidents. Approximately a week after he was injured and before anyone else used his miter saw, Hamilton inspected it. He claims that before the accident, the saw's blade always stopped in three to five seconds after the trigger was released. He found that after the accident, the blade took ten to fifteen seconds to come to a halt. (Hamilton Dep. at 67-69.) Additionally, Gililland claims that he tested the saw after Hamilton did, and that the blade required a longer time than usual to stop. (Gililland Dep. at 23.) While Hamilton's case would certainly be bolstered if the brake malfunctioned *before* as opposed to after the accident, the failure of the brake after the accident may give rise to an inference that it failed during the accident. As in Agostino, where the court found evidence of the saw guard's malfunction from the fact that the guard was "jammed" immediately after the accident, we find that evidence that the brake failed after the accident a sufficient basis for a reasonable jury to infer that the saw malfunctioned at the time of the accident.

Hamilton must next show that a jury could reasonably infer the existence of a manufacturing defect from the miter saw's malfunction at the time of the accident. Although Hamilton has presented sufficient evidence of the malfunction, he has not satisfied his burden under the malfunction theory because he has not provided evidence such that a reasonable jury could find that a defect existed when the miter saw left Emerson's control. Hamilton testifies that he made at least 1,000 and as many as 3,000 cuts with the saw before he was injured, (Hamilton Dep. at

58.) Also, he does not recall that the saw ever malfunctioned before the day of his injury. (Id. at 66.) Although Emerson does not specifically argue that Hamilton's continued successful use precludes the finding of a defect when the saw left the hands of the manufacturer, we will address the issue independently.

Pennsylvania courts have been somewhat inconsistent as to how to analyze at summary judgment a plaintiff's continued successful use of a product. In considering lapse of time and continued use, we keep in mind that "[t]he questions when and where [sic] a defect originated should be left to the finder of fact so long as reasonable and well balanced minds (could) be satisfied from the evidence adduced that the defective condition existed when the (product) was delivered." Sochanski v. Sears, Roebuck and Co., 621 F.2d 67, 70 (3d Cir. 1980) (citing Greco v. Bucciconi Engineering Co., 407 F.2d 87, 90 (3rd Cir. 1969)) (internal quotation marks omitted).

In Woodin v. J.C. Penney Co., Inc., 629 A.2d 974 (Pa. Super. 1993), a case in which the plaintiff proceeded under the malfunction theory, the Pennsylvania Superior Court found that where a freezer had functioned "flawlessly" for more than eight years prior to its malfunction, a jury could not reasonably infer the presence of a defect from the malfunction of the freezer alone. The court cited a previous Pennsylvania Supreme Court case for authority:

We recognize that, as a general rule, "prolonged use of a manufactured article is but one factor, albeit an important one, in the determination of the factual issue whether [a

defect in design or] manufacture proximately caused the harm." The age of an allegedly defective product must be considered in light of its expected useful life and the stress to which it has been subjected. In most cases, the weighing of these factors should be left to the finder of fact. But in certain situations the prolonged use factor may loom so large as to obscure all others in a case. Professor Prosser has summarized the position generally taken by the courts on this question: "[Lapse of time and long continued use] in itself is not enough, even when it has extended over a good many years, to defeat the recovery where there is satisfactory proof of an original defect; but when there is no definite evidence, and it is only a matter of inference from the fact that something broke or gave way, the continued use usually prevents the inference that the thing was more probably than not defective when it was sold."

Id. at 976 (citing Kuisis v. Baldwin-Lima-Hamilton Corp., 319 A.2d 914, 923 (Pa. 1974)). The court seemed to suggest that in many cases involving the malfunction theory (that is, when a jury must infer a defect from a malfunction and a plaintiff has no other evidence of the defect), the plaintiff cannot survive summary judgment if he has successfully used the product for a long time before his accident. By taking this position, the Kuisis and Woodin courts effectively stated that in such cases, the plaintiff does not present a case-in-chief free of reasonable secondary causes, as lapse of time and continued successful use of the product are automatically fatal evidence of normal wear and tear.

The Eastern District of Pennsylvania has interpreted continued use differently. In Harley v. Makita USA, Inc., 1997 WL 197936, *1 (E.D. Pa. April 22, 1997), a case in which plaintiff Harley alleged injuries resulting from a defective table saw, the court denied summary judgment to the manufacturer

in part because there was no evidence as to the condition of the saw when it left Makita, the manufacturer. Makita argued that it was entitled to summary judgment because there was no evidence that the saw was defective when it left its control. The court rejected this argument:

While [there may be no evidence that the saw was defective when it left the hands of the manufacturer], and this aspect may be part of plaintiff's prima facie case, at this stage in order for the defendant to be entitled to summary judgment on this issue as a matter of law, it must come forward with proof that the saw was not defective when it left its hands, or some evidence that would preclude plaintiff from proving that the blade brake was defective when it left Makita's hands. . . Accordingly, defendant is not entitled to summary judgment on this basis.

Id. at *4. The court also stated that "[l]apse of time and continued use may preclude a jury inference of a defect, but are not sufficient proof of absence of defect on which to rest summary judgment in favor of defendant." Id. at *4 n. 3. The court in effect shifted the burden to the defendant manufacturer to prove that its product was not defective when it left its control.

In light of the above discussion, we are faced with conflicting propositions. Kuisis and Woodin stated that summary judgment for lack of defect is often warranted in cases under the malfunction theory in which there has been prolonged use of the product and there exists no independent evidence of the product's defect other than its malfunction. Harley stated that prolonged use may never be a sufficient reason to find an absence of a defect and grant summary judgment to the manufacturer. Harley

also puts a burden on the manufacturer to produce evidence that the product was *not* defective when it left its hands.

We adopt the teachings of Kuisis and Woodin, and find that Hamilton has not met his burden. The only evidence of the miter saw's defect is its possible malfunction. Prior to the accident, Hamilton used the saw without incident for more than a year and for a great number of cuts. He admits that he is unaware of any previous malfunction of the miter saw. Consistent with Kuisis and Woodin, we find that Hamilton's continued use of the miter saw precludes a reasonable inference that the saw was defective when it left Emerson's control.⁷ This is particularly true here, where plaintiff has failed to produce any evidence from which a jury might determine a reasonable life-span or usage limit for this particular product. It may be that usage of the saw over a period of one to two years and for 1 to 3 thousand cuts would be well within design norms, but it would be speculative for the jury so to determine on this record. Hamilton's products liability claim must therefore fail.⁸

7 We simply disagree with Harley's interpretation of the law. If lapse of time and continued use may preclude a jury inference of defect, it follows that it may also prevent the case from getting to the jury at all. In stating that lapse of time and continued use are not sufficient proof on which to rest summary judgment in favor of a defendant, Harley is inconsistent with the Pennsylvania Supreme Court's decision in Kuisis. Furthermore, we know of no authority that holds that a defendant has any burden to show that its product was not defective upon leaving its hands.

8 We note that Dr. Wilcox's testimony, even if found to be admissible under Daubert, would not have established that a
(continued...)

IV. CONCLUSION

Based on the foregoing reasons, Emerson's motion to exclude Dr. Wilcox as an expert witness will be granted. Its motion for summary judgment will also be granted. An order consistent with this memorandum will be issued.

James F. McClure, Jr.
United States District Judge

8(...continued)
defect existed in the miter saw upon its departure from Emerson.

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA

LARRY HAMILTON,	:	
Plaintiff	:	No. 4:00-CV-00068
	:	(Judge McClure)
v.	:	
	:	
EMERSON ELECTRIC COMPANY,	:	
Defendant	:	

O R D E R

March 8, 2001

For the reasons stated in the accompanying memorandum,

IT IS ORDERED THAT:

1. The motion to exclude Steven A. Wilcox, Ph.D., filed by defendant Emerson Electric Co. (rec. doc. no. 19), is granted.
2. Emerson's motion for summary judgment (rec. doc. no. 19) is granted.
3. The clerk is directed to enter judgment in favor of defendant and against plaintiff, and to close the file.
4. The clerk is directed to fax a copy of this order only to counsel today.

James F. McClure, Jr.
United States District Judge

FILED: 03/08/01